

AMENDMENT TO THE CLAIMS

IN THE CLAIMS:

Claim 1 (currently amended):

A multifunction remote controlled recording/playback system for recording full motion video signals comprising a series of sequential “still” frames, the recording/playback system comprising:

- a. a recorder/player;
- b. a central processing unit for controlling the recording/playback system;
- c. a video signal source for providing a video signal;
- d. a video signal display monitor;
- e. a video signal transmission system;
- f. a video signal switching system responsive to commands from the central processor unit for selectively distributing the video signal to the recorder/player, the display monitor and the transmission system, wherein a full motion video signal may be distributed to the recorder/player while simultaneously a selected still frame of the video is distributed to other components of the system, wherein a user may record, capture, transmit, view or retrieve the selected still frame without interruption of the continuous recording or playback of the full motion video signal by the recorder/player; and
- g. a marking signal generator, whereby specific, selected still frames of the recorded full motion video signal may be marked, the system being adapted to select said

frames by searching for the marks, for distribution of the recorded marked frames by the video switching system.

Claim 2 (original):

The multifunction remote controlled recording/playback system of claim 1, further comprising a digital capture system for creating a still frame on the fly as the full motion video signal is generated by the video signal source, whereby a full field still frame is produced.

Claim 3 (original):

The multifunction remote controlled recording/playback system of claim 1, further comprising means for capturing a selected group of sequential still frames on the fly as the full motion video signal is generated by the video signal source.

Claim 4 (original):

The multifunction remote controlled recording/playback system of claim 1, wherein the video signal transmission system is adapted for transmitting full motion video signals in a first mode as the full motion video signal is generated by the video signal source and in a second mode as a playback of the recorded full motion video signal from the recorder/player.

Claim 5 (original):

The multifunction remote controlled recording/playback system of claim 1, further including an audio signal generator for generating an audio signal which can be recorded by the recorder/player in real time synchronization with the full motion video signal.

Claim 6 (original):

The multifunction remote controlled recording/playback system of claim 1, further including a data signal generator for generating a data signal which can be recorded by the recorder/player in real time synchronization with the full motion video signal.

Claim 7 (original):

The multifunction remote controlled recording/playback system of claim 6, wherein the data signal generator is a gps signal generator.

Claim 8 (cancelled):

Claim 9 (previously presented):

The multifunction remote controlled recording/playback system of claim 1, wherein the marking signal generator is operative in a plurality of modes, a first mode being manually activated by an operator and a second mode being activated by a pre-selected data signal.

Claim 10 (original):

The multifunction remote controlled recording/playback system of claim 1, wherein the central processing unit is a Pentium class processor.

Claim 11 (currently amended):

A multifunction remote controlled recording/playback system for recording full motion video signals comprising a series of sequential “still” frames, the recording/playback system comprising:

- a. a recorder/player unit;
- b. a central processing unit for controlling the recording/playback system;
- c. a video signal source for providing a video signal;
- d. a video signal transmission system;
- e. a video signal display monitor;
- f. a video signal switching system responsive to commands from the central processor unit for selectively distributing the video signal to the recorder/player, the display monitor and the transmission system, wherein a full motion video signal may be distributed to the recorder/player unit while simultaneously a selected still frame of the video signal is distributed to other components of the system, wherein a user may record, capture, transmit, view or retrieve the selected still frame without interruption of the continuous recording or playback of the full motion video signal by the recorder/player unit;
- g. an audio signal source for providing an audio signal to the central processing unit for recording on the recorder/player unit; and
- h. a marking signal generator, whereby specific, selected still frames of the recorded full motion video signal may be marked, the system being adapted to select said frames by searching for the marks, for distribution of the recorded marked frames by the video switching system.

Claim 12 (previously presented):

The system of claim 11 wherein the audio signal source comprises an aircraft interphone.

Claim 13 (previously presented):

The system of claim 11 further comprising a data signal source for providing a data signal to the central processing unit for recording on the recorder/player unit.

Claim 14 (previously presented):

The system of claim 13 wherein the data signal source comprises a GPS receiver.

Claim 15 (previously presented):

The system of claim 11 further comprising an encryption unit for encrypting at least one signal.

Claims 16-20 (cancelled):

Claim 21 (currently amended):

A multifunction remote controlled recording/playback system for recording full motion video signals comprising a series of sequential “still” frames, the recording/playback system comprising:

- a. a recorder/player;
- b. a central processing unit for controlling the recording/playback system;

- c. one or more video signal sources for providing a video signal;
- d. a video signal display monitor;
- e. a video signal transmission system;
- f. a video signal switching system responsive to commands from the central processor unit for selectively distributing the video signal to the recorder/player, the display monitor and the transmission system;

said video switching system comprising a first switching means for switching between a first position and a second position, wherein at said first position said first switching means provides for simultaneous distribution of said video signal to said recorder/player, said processing unit, and said display monitor such that a full motion video signal may be recorded by said recorder/player while one or more selected still frames of said video signal are generated to produce one or more full field still frames; and

said first position of said first switching means allowing each still frame to be stored by a memory coupled to said processing unit such that still frame images may be recorded, captured, transmitted, viewed or retrieved therefrom without interruption of the continuous recording or playback function of the full motion video signal by the recorder/player.

Claim 22 (previously presented):

The multifunction remote controlled recording/playback system of claim 21, wherein at said second position said first switching means allows playback of recorded full motion video signal from said recorder/player or display of said full field still frames from said memory upon the display monitor.

Claim 23 (previously presented):

The multifunction remote controlled recording/playback system of claim 21, further comprising a remote control unit coupled to said processing unit for manual control of said system.

Claim 24 (previously presented):

The multifunction remote controlled recording/playback system of claim 21, further comprising a data signal generator for generating one or more data signals for recording upon said recorder/player, displaying upon said display monitor, or transmission upon said transmission system in real time synchronization with said full motion video signal.

Claim 25 (previously presented):

The multifunction remote controlled recording/playback system of claim 21, wherein said video signal switching system further comprises a second switching means for switching between a plurality of said video signal sources.

ARGUMENT

In the office action dated January 29, 2004, the Examiner rejected the declaration filed on March 3, 2003 to overcome the Fujita et al. reference. Additionally, the Examiner rejected claims 1-3, 5-6, 9 and 11 under 35 U.S.C. §103(a) as being unpatentable over Kozuki et al. (US 6,069,994) in view of Nagasaka et al. (US 6,195,497). The Examiner also rejected claims 4 and 21-23 under 35 U.S.C. §103(a) as being unpatentable over Kozuki et al. in view of Nagasaka et al. and Krause et al. (US 6,304,714). The Examiner also rejected claims 7 and 13-15 under 35 U.S.C. §103(a) as being unpatentable over Kozuki et al. in view of Nagasaka et al. and Cooper (US 5,508,736). Additionally, the Examiner rejected claim 10 under 35 U.S.C. §103(a) as being unpatentable over Kozuki et al. in view of Nagasaka et al. and Freeman (US 5,684,716). Additionally, the Examiner rejected claim 12 under 35 U.S.C. §103(a) as being unpatentable over Kozuki et al. in view of Nagasaka et al. and Nitardy (US 5,396,651). Finally, the Examiner rejected claim 24 under 35 U.S.C. §103(a) as being unpatentable over Kozuki et al. in view of Nagasaka et al., Krause et al., and Cooper.

Declaration filed on March 3, 2003

In the Office Action dated January 29, 2004, the Examiner stated that the evidence submitted on behalf on the declaration filed on March 3, 2003 is insufficient to establish a conception of the invention prior to the effective date of the Fujita et al. reference. Specifically, the Examiner stated that he cannot determine, solely by the figure provided, whether 1) a full

motion video signal may be distributed to the recorder/player while a selected still frame is distributed to other components of the system and 2) the video signal is simultaneously distributed to the recorder/reproducer, processor, and display monitor. Applicant respectfully argues that the figure provided as evidence shows the same components and parts, as well as a substantially similar figure, as the figure 2 provided in Applicant's disclosure. If the parts are identical in the two figures, before and present, the capabilities are also the same. A component would not be in the figure and have no function at all, or even have a different function if the figures are the same. The components are there for a function and those functions are the same as in the present application, i.e. the video signal can be simultaneously distributed to the recorder/reproducer, processor, and display monitor. For these reasons, Applicant's disclosure filed on March 3, 2003 should be sufficient to overcome the Fujita et al. reference.

35 U.S.C. §103(a):

Regarding independent claims 1, 11 and 21, Applicant has amended the claims to clarify and distinguish the invention over all prior arts that have been cited. Applicant has amended the claim to include the language "simultaneously" and "wherein a user may record, capture, transmit, view or retrieve the selected still frame without interruption of the continuous recording or playback of the full motion video signal by the recorder/player unit", which can find its support in Applicant's disclosure on page 2, lines 10-15, lines 26-28; page 3, lines 15-18; page 5, lines 1-4; and page 10, lines 1-3. Applicant's invention allows one or more selected still frames to be recorded, captured, transmitted, viewed, or retrieved without the interruption of the continuous recording or playback function of the full motion video signal by the recorder/player unit. The Kozuki et al. patent focuses

on the ability to record a digital still image signal and an analog video signal on the same recording medium. On column 8, lines 25-50, of Kozuki et al., the patent states that “only the moving-image recording area of each track is reproduced so that it is impossible for an operator to visually confirm the substantial contents of the scene.” Kozuki et al. “copes with this problem ... by recording the contents of track M5 in the moving-image recording area of each of tracks M6 to M9 for four fields.” Therefore, “a frozen still image is displayed during only a particular time duration so that the operator can easily confirm the timing when the still image was recorded and the contents thereof, merely by monitoring the contents of the moving-image recording areas of the respective tracks.” Thus, the Kozuki patent is not capable of viewing the digital still image at the same time as recording the full motion video. When the still image is recording in the analog motion tracks, recording of the full motion video stops for a while in the moving-image recording area. Applicant’s invention avoids this problem by allowing a user to view the still image without interrupting the recording process of the full motion video. Additionally, the Examiner stated that Krause et al. teaches simultaneous recording and playback using the same archival medium. However, the Applicant’s invention allows still images to be viewed while continuously recording the motion video signal, in which the still image can be captured on the fly. Krause et al. only uses motion video images and does not discuss the use of capturing, transmitting, or displaying still images. Still images from a motion video would experience tearing, which would not be the quality of a full field still frame. Also, the Krause et al. patent utilizes an input and output buffering system while Applicant’s invention does not utilize any buffering system. The limitation with the buffering system is that the buffer will quickly run out of space and recording will stop if the user does not wish to erase any previous programs located on the archival medium. Applicant’s invention does not make use of a buffer system and will not experience those similar drawbacks. Since the

technology is different and Krause et al. does not involve capturing/displaying/transmitting still images simultaneously with full motion video recording, Krause et al. does not anticipate, suggest, nor teach Applicant's invention. Secondly, in the Office Action dated January 29, 2004, the Examiner stated in number 5, on page 4, that Kozuki et al. discloses a selected still frame of the video signal being distributed to other components in Figure 7, component 313. However, component 313, in Figure 7, does not depict a component that receives a selected still frame of the video signal; but instead, component 313, as shown on column 8, lines 8-11, is a still-image recording controlling circuit that controls timings associated with still-image recording and those associated with moving-image recording, as well as the memory. This controlling circuit is not a component that receives a still frame of the video signal. Finally, in the Office Action dated January 29, 2004, the Examiner stated in number 5, on page 4 and page 5, that Nagasaka et al. teaches a marking signal generator, whereby specific, selected still frames of recorded full motion video signal may be marked, the system being adapted to select said frames by searching for the marks, for distribution of the recorded marked frames by the video switching system. Nagasaka et al., on column 6, lines 36-38, states that link information must already be set. Also, Nagasaka et al., provides a serial number for each frame and then divides the frames into separate blocks to assist in the subject automatic retrieving algorithm. On column 6, lines 52-55, Nagasaka et al. states that "when a predetermined number of blocks containing the characterizing colors exists for each color in one frame, the frame is judged as containing the subject." Applicant's invention does not search by colors in a block, but allows a user to place a mark at selected frames. In Nagasaka et al., every frame has been marked and does not allow a user to mark only the selected frames that he/she may wish. For the above mentioned reasons, independent claims 1, 11 and 21 should now be in

allowable form. Independent claims 1, 11 and 21 are not taught, suggested, nor anticipated by any of Examiner's cited references.

Regarding claims 2-7, 9 and 10, these claims should be in allowable form because they all ultimately depend upon another allowable independent claim 1. Additionally, the Examiner took Official Notice in the Office Action on page 6, regarding claim 9, that two methods of selecting "representative frames" are well known in the art. First, according to MPEP §2144.03, it states that it would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well-known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. Applicant argues that the marking signal generator being operative in a plurality of modes, a first mode being manually activated and a second mode being activated by a pre-selected data signal is a technical fact in the area of esoteric technology. Thus, documentation is required in this instance. Thus, the claims 2-7, 9 and 10 should be in acceptable form. These claims should no longer be taught, suggested, nor anticipated by any of Examiner's cited references.

Regarding claims 12-15, these claims should be in allowable form because they all ultimately depend upon another allowable independent claim 11. Additionally, the Examiner rejected claim 12 in the Office Action in section 9, on page 10 and 11, stating Nitardy teaches the use of an aircraft interphone. Applicant's invention utilizes a different technology which uses video recordings of motion and still images simultaneously. Applicant's invention allows a user to record, capture, transmit, view or retrieve the selected still frame without interruption of the continuous recording or playback of the full motion video signal by the recorder/player. Nitardy only uses audio in his patent

and does not suggest the usages of video. Thus, claims 12-15 should also be in allowable form. These claims should no longer be taught, suggested, nor anticipated by any of Examiner's cited references.

Regarding claims 22-25, these claims should be in allowable form because they all ultimately depend upon another allowable independent claim 21. Additionally, the Examiner rejected claim 22 in the Office Action in section 6, on page 9, stating Kozuki et al. discloses that the second position of the switching means allows playback of the recorded full motion video signal from the recorder/player or display of the full field still frames from the memory on the display monitor. As discussed above regarding independent claims 1, 11 and 21, Kozuki et al is not capable of continuously recording a motion image while displaying a still-image. Also, in reference to figure 7, which consists of components 313, 305, and 307-311, as stated in regards to claim 1, Kozuki et al. states that it cannot reproduce the still-image from the recorded track, but copes with it by recording the same motion image for four frames on the motion track. By doing this, new motion is not recorded for a while. Hence, recording is briefly stopped. Thus, claims 22-25 should also be in allowable form. These claims should no longer be taught, suggested, nor anticipated by any of Examiner's cited references.